

# Transportation Primer

**Joint Appropriations Subcommittee on Transportation**  
**February 13, 2013**

**Amna Cameron**  
**Fiscal Research Division**



**FISCAL RESEARCH DIVISION**  
A Staff Agency of the North Carolina General Assembly

# Agenda

- Background
- Transportation Revenues
  - Items for Consideration
- Transportation Spending
  - Highway Fund
  - Highway Trust Fund
  - Items for Consideration
- Summary

# Background

North Carolina's State-Owned Highway System is:

- Large – 79,000 miles, second largest in the country
  - Texas is number one, by a few hundred miles
  - North Carolina secondary roads are state-owned
- Centralized – All dollars flow to Raleigh
  - Transportation project decisions made in Raleigh by Board of Transportation (G.S. 143B-350) and Secretary (S.L. 2012-84) subject to:
    - Statutory formulas
    - Local Input

# Background, continued

## State Owned Roads

State	Road Miles Owned by State Agency	Total Road Miles	Percent Owned by State Agency
Florida	12084	121703	10%
Georgia	17,984	122,917	15%
<b>North Carolina</b>	<b>79,466</b>	<b>105,653</b>	<b>75%</b>
South Carolina	41,422	66,024	63%
Tennessee	13,871	94,207	15%
Texas	80,067	311,249	26%
Virginia	58,103	74,378	78%
U.S. Total	784,588	4,107,691	19%

Source: FHWA, Highway Statistics 2009 and 2010

- Greater share than Florida, Georgia, or the nation as a whole.
- Local roads usually owned and controlled by local jurisdictions.

# Background, continued

## 1915

- First full fledged State Highway Commission established
  - Provided road building assistance to counties

## 1921-1929

- NCGA authorizes takeover of 5500 miles of county roads.
- Motor Fuel Tax raised to 5 cents per gallon (equivalent to 63 cents per gallon today)
- \$115 million in highway bonds issued
- North Carolina is the “Good Roads State”

# Background, continued

## 1931

- During the Depression the state assumes responsibility for county roads, giving state responsibility for all roads except city streets.

## 1951

- Powell Bill
  - State takes over city streets which are part of the state highway system
  - Provided ½ cent per gallon from the motor fuel tax to cities for other city streets; allocated based on statutory formula.

# Background, continued

## 1980's

- Transportation infrastructure and funding mechanisms prove inadequate for the state's growth.
- Highway Study Commission recommends a multibillion dollar highway construction program.

## 1989

### **Creation of Highway Trust Fund (HTF)**

- Goals are
  - Completion of the Intrastate Highway System, a 3600 mile network of four-lane highways.
  - Construction of seven urban loops.
  - Pave 10,000 miles of state-maintained dirt roads.
  - Increase Powell Bill funding.

# Background, continued

## 2002

- North Carolina Turnpike Authority created as an independent agency to examine the feasibility of tolling roads. The original projects were defined in Statute in 2005.

## 2003 and 2004

- Project lists for Intrastate System and Urban Loops are amended

## 2007

- S.L. 2007-428 (SB 1513) Counties authorized to participate in the cost of rights-of-way, construction, reconstruction, improvement, or maintenance of roads on the State Highway System under agreement with the Department of Transportation.



# **Background, continued**

## **2008**

### **Gap Funding for Turnpike Authority**

- S.L. 2008-107 begins gap funding for four North Carolina Turnpike Authority toll projects, decreasing the transfer from the Highway Trust Fund to the General Fund.

## **2010**

### **North Carolina Mobility Fund**

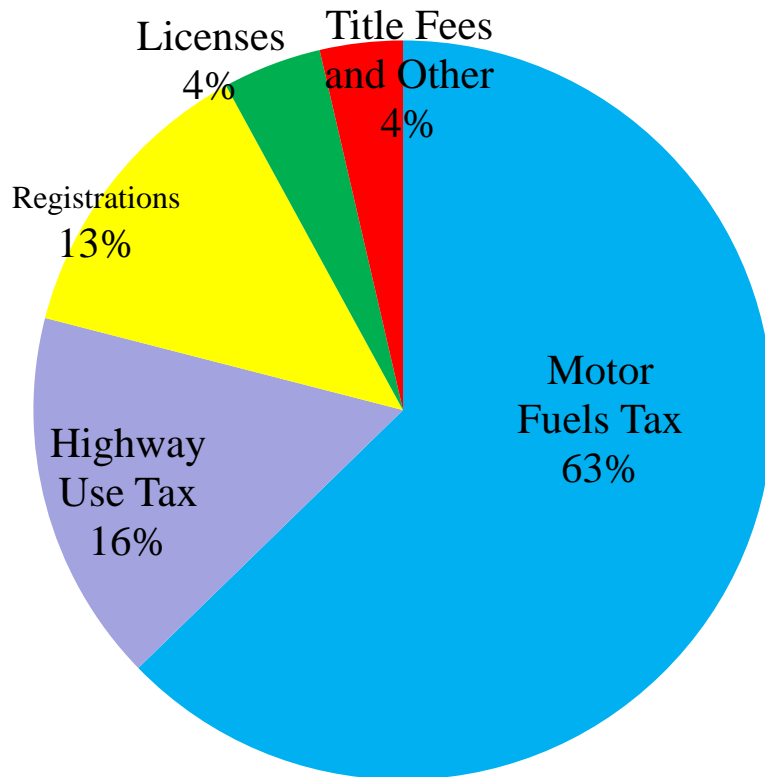
- S.L. 2010-31 (SB 897) established Mobility Fund.

# FY2011-13 Session Recap

- Major bridge and contract resurfacing programs
- Prioritization codified
- Intrastate and Urban Loops funding increased
- Urban Loop projects removed from statute
- Mobility Fund redefined
- Privatization and outsourcing increased
- Key IT projects advanced

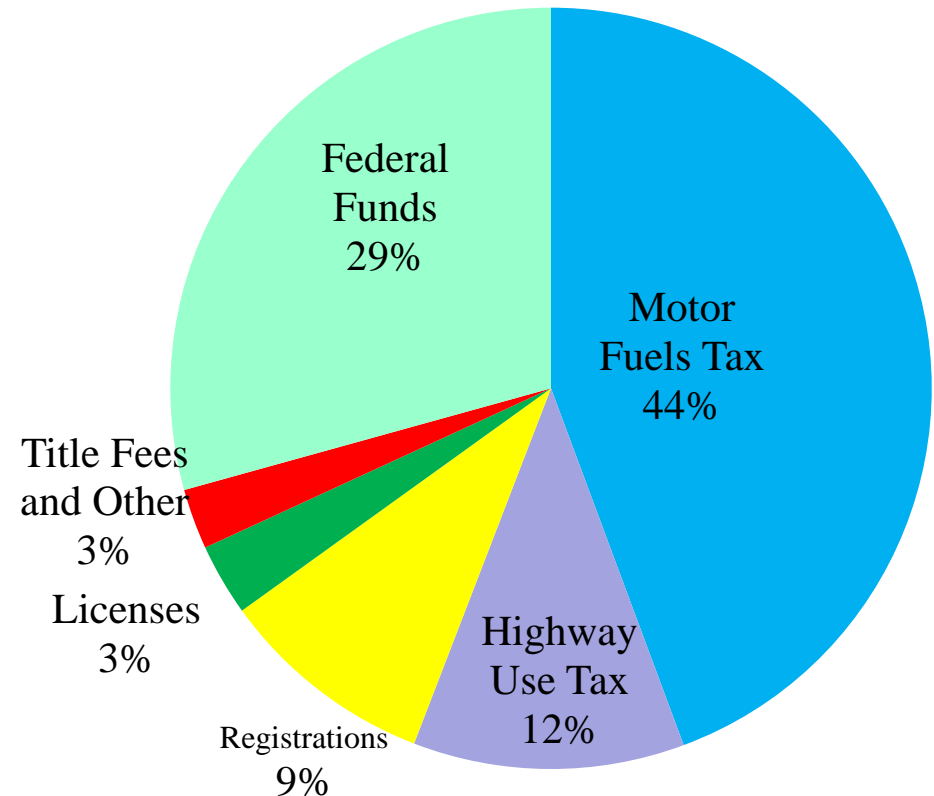
# Transportation Revenues FY 2013

## State Revenues



**\$3.0 billion**

## Total Revenues



**\$4.2 billion**

# Transportation Revenues

## Current vs Forecasted

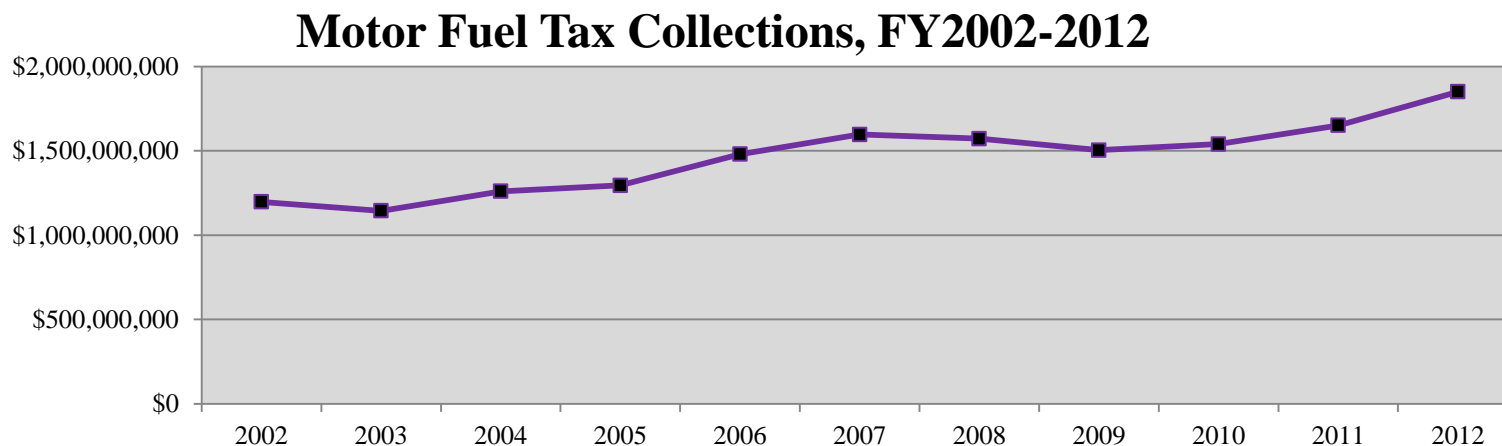
- This is a volatile forecast and represents a consensus between DOT and OSBM, and then Fiscal Research.
- Forecast will be redone in April 2013 and any necessary changes will be incorporated in the Final Budget.
- Assumes Motor Fuels Tax rate is not capped.

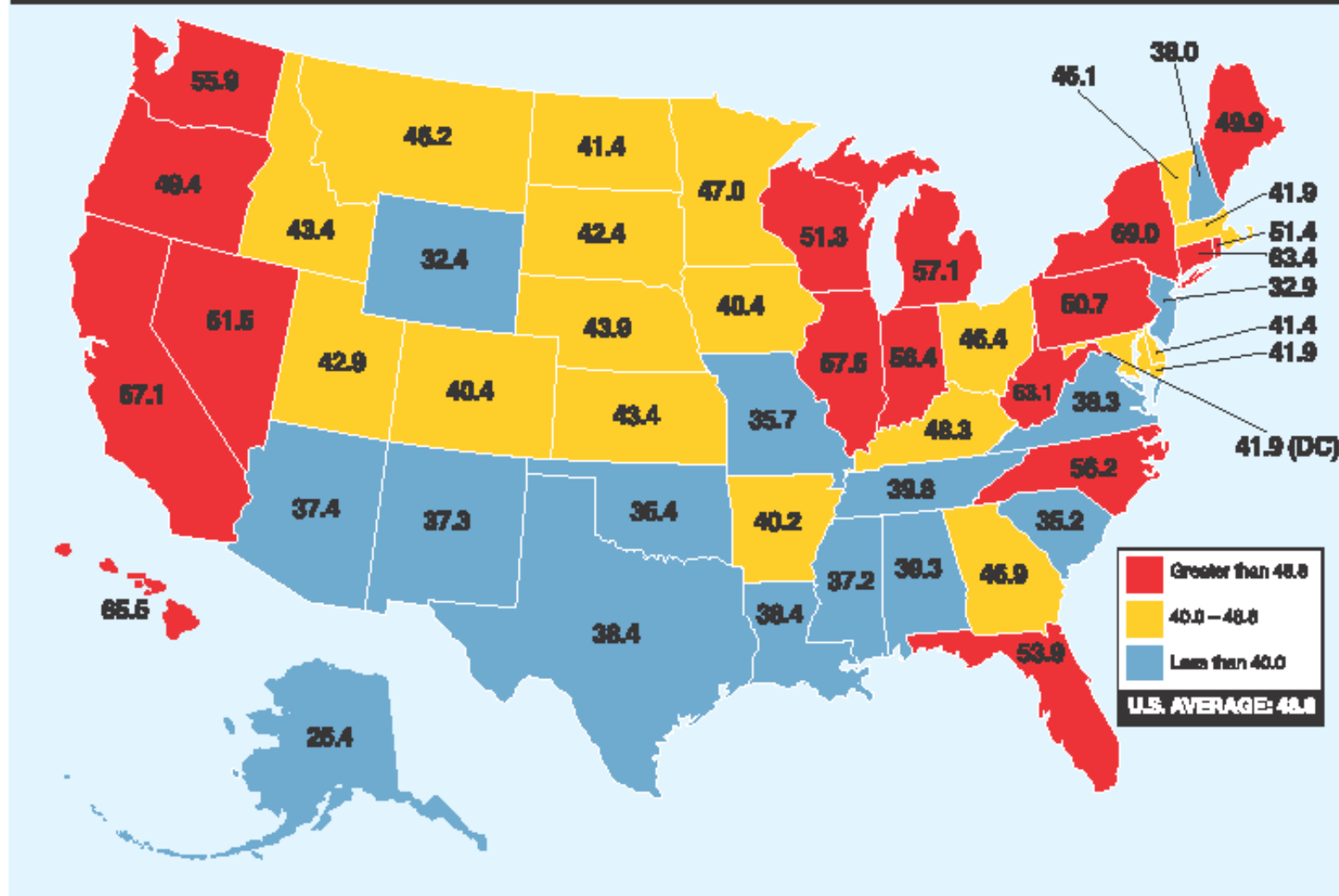
	Certified FY 2013	Forecasted FY 2014	Forecasted FY 2015
Highway Fund	\$2,021,030,000	\$1,937,200,000	\$1,892,400,000
Highway Trust Fund	\$1,070,320,000	\$1,105,700,000	\$1,105,400,000
Average Motor Fuels Tax Rate	37.5 cents per gallon	37.4 cents per gallon	36.5 cents per gallon

# Transportation Revenues

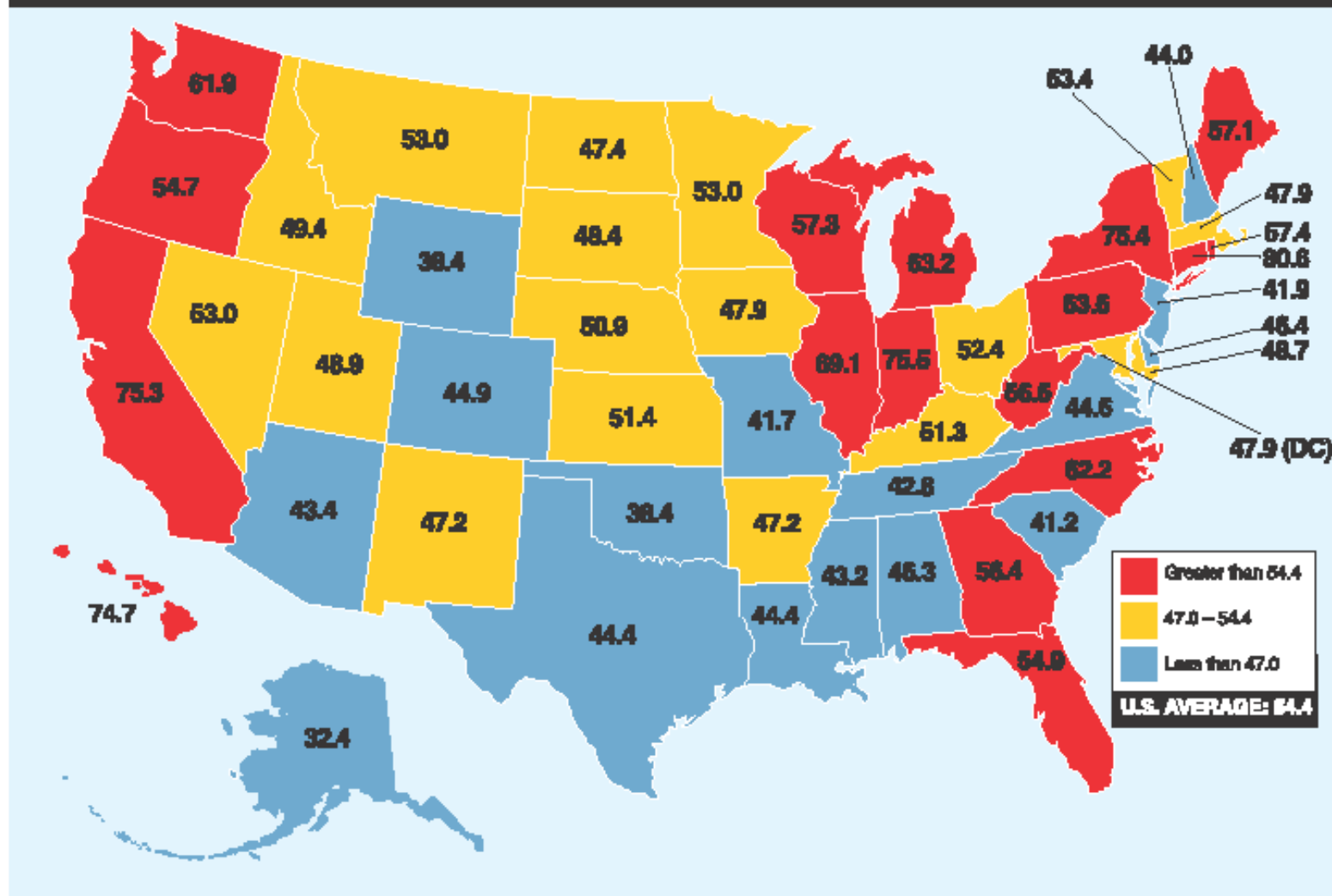
## Motor Fuel Taxes

- Rate is 37.5 cents per gallon (cpg) through June 30, 2013.
- 17.5 cpg fixed + variable rate based on wholesale price history.
- One cent equals  $\approx$  \$50 million in tax revenues.
- Consumption down due to recession, greater fuel efficient vehicles, and higher fuel prices.





Disclaimer: This report is posted for informational purposes only and should not be relied upon or used for compliance purposes.



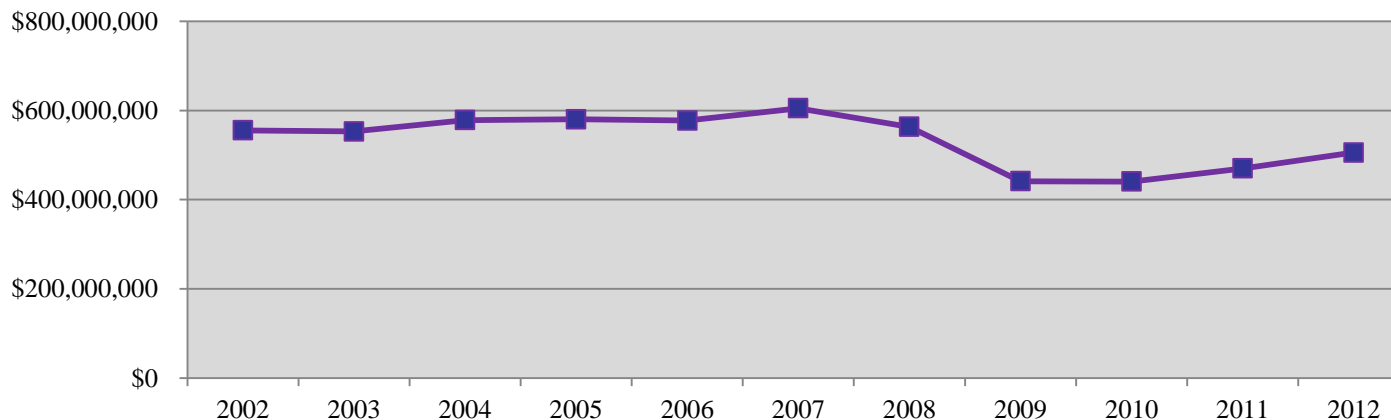
Disclaimer: This report is posted for informational purposes only and should not be relied upon or used for compliance purposes.

# Transportation Revenues

## Highway Use Tax

- Highway Use Tax is 3% of value of vehicle net of trade.
- North Carolina tax is lower than Georgia, Virginia, and South Carolina.
- Revenues projected to be slightly higher but still far below 2002-2008 revenue collections.

**Highway Use Tax Collections , FY2002-2012**



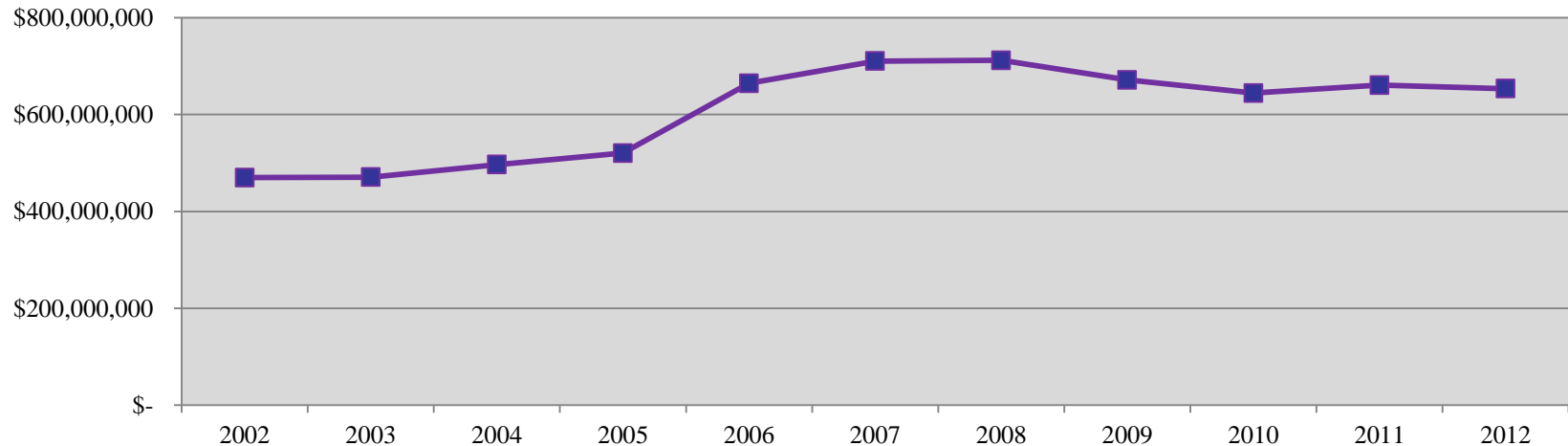


# Transportation Revenues

## Licenses and Fees

- Driver licenses, vehicle registration fees, truck licenses, titles...
- Generally driven by demographics.
- General Assembly increased these fees by about 20% in 2005 to account for inflation in the years since they had been set.
- Overall, these fees are similar to surrounding states.

**Licenses and Fees Collections, FY2002-2012**



# Transportation Revenues

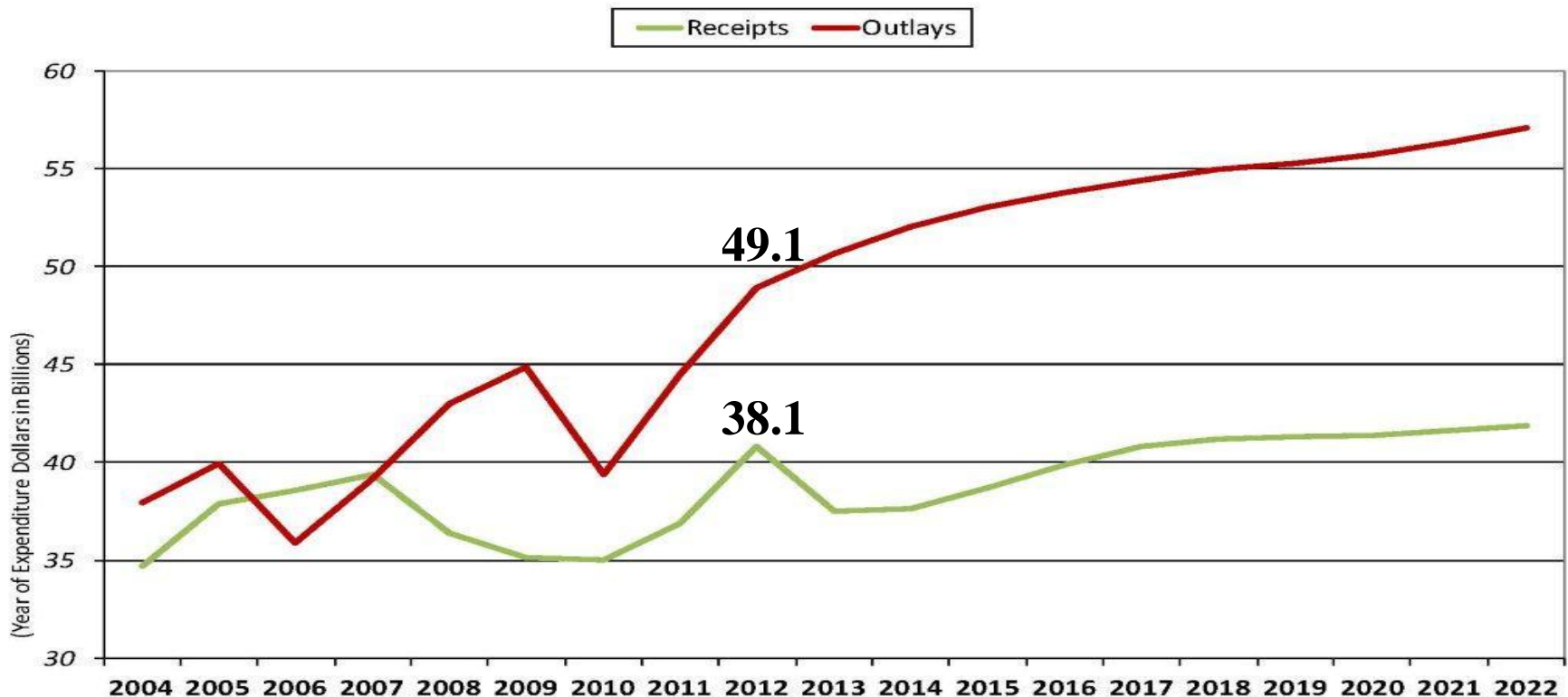
## Federal Aid

- In recent years federal aid has averaged about \$1 billion.
- MAP-21 in effect through October 1, 2014
  - Similar Funding Level
  - Significant Program Consolidations
  - Additional tolling authority (if road capacity increased)
  - Increased TIFIA loan program
- Potential to lose federal Highway Trust Fund monies in the future. Federal Highway Trust Fund bailouts may not be sustainable.

# Transportation Revenues Federal Aid



**Highway Trust Fund Receipts and Outlays Discrepancy**



Excludes General Fund liquidity transfers of \$8.017 billion in September 2008; \$7 billion in August 2009; \$19.5 billion in March 2010; \$2.4 billion in June 2012 (from LUST); \$6.2 billion in October 2012; and \$7.8 billion in October 2013.  
Does not include Transit General Fund outlays.

**Source: AASHTO**

# Transportation Revenues - Tolls

## North Carolina Turnpike Authority

Name	Total Cost	Years Tolled	Annual Gap Funding	Issues
Triangle Expressway	\$1 billion	29	\$25 million (FY 2009)	Project Complete. First year toll collections = \$4 million
Monroe Connector	\$725 million	30	\$24 million (FY 2011)	Debt issued. Construction postponed. Record of Decision pulled. Interest Paid to Date = \$40.8m
Mid-Currituck Bridge (with P3)	\$651 million	50	\$28 million (FY 2014)	Commercial close delayed until costs agreed upon. No Record of Decision issued.
Garden Parkway	\$898 million	30	\$35 million (FY 2014)	Water quality permit applications pulled. Lawsuit in progress.

# Transportation Revenues

## Potential Items to Consider

- Should the motor fuels tax be modernized to reflect changes in consumer behavior and technological advancements?
- Should other revenue options be considered?
  - Virginia's path?
  - Increased tolling
  - Vehicle miles travelled
  - Public private partnerships
- Should exemptions in the Highway Use Tax continue?
- Should fees be indexed for inflation?
- Others?

# FY 2013 Flow of Funds (in millions)

## Funding:

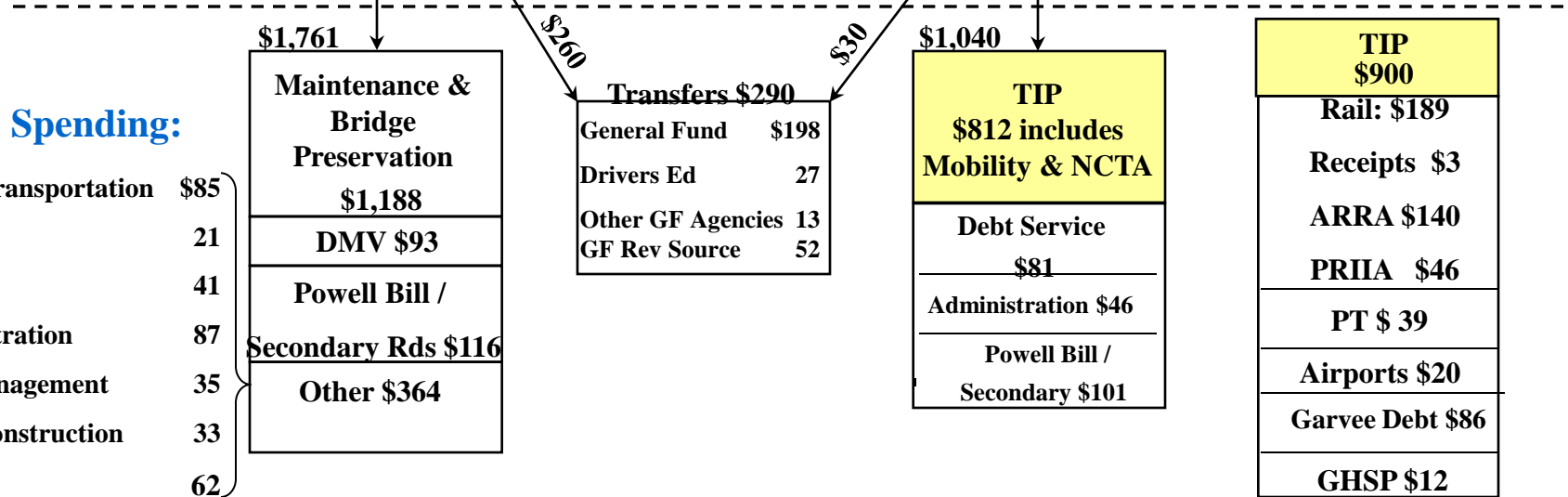
**Highway Fund**  
**\$2,021**

<b>Motor Fuels Tax</b> <b>\$1,414</b>
<b>Registrations</b> \$392
<b>Licenses</b> \$130
<b>Other</b> \$85

**Highway Trust Fund**  
**\$1,070**

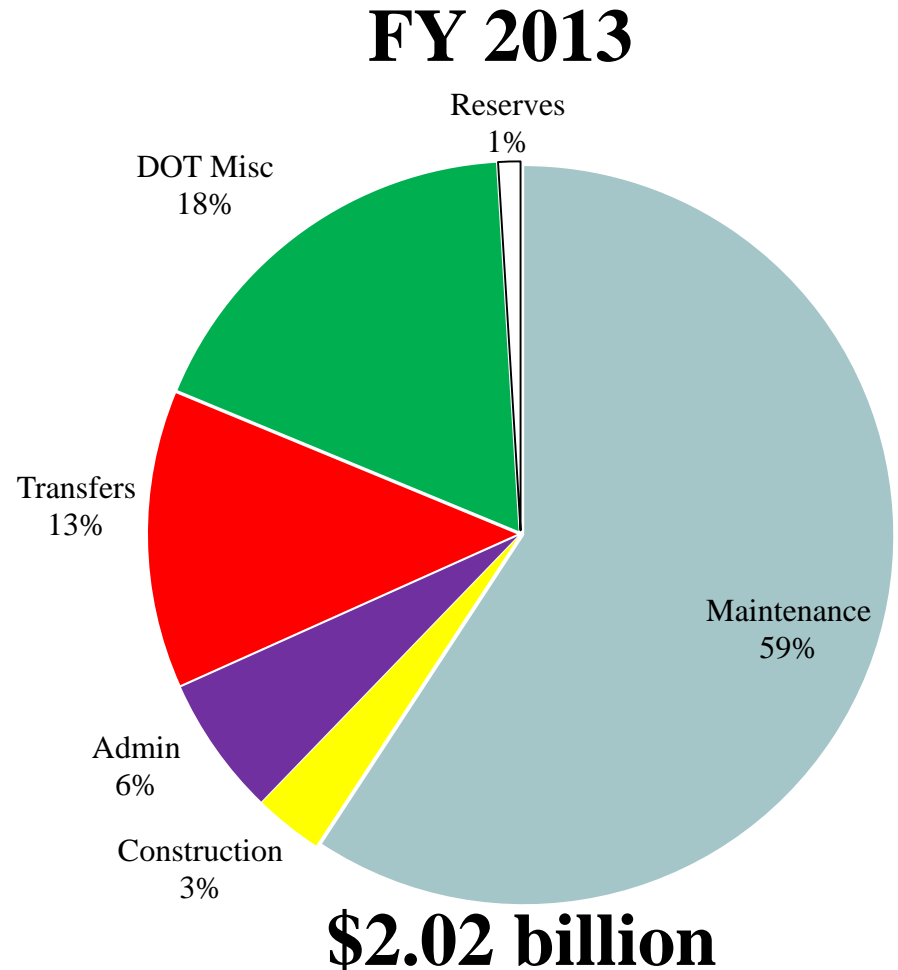
<b>Motor Fuels Tax</b> <b>\$471</b>
<b>Highway Use Tax</b> <b>\$490</b>
<b>Title Fees &amp; Other</b> <b>\$109</b>

**Federal Aid**  
**\$1,246**



# Transportation Spending Highway Fund

- Maintenance and Operations
- DOT Misc. includes intermodal operations and DMV
- Transfers made to General Fund, Departments of Agriculture, Revenue, Public Instruction, Public Safety, Enviro. and Natural Resources, Agriculture, and Health and Human Services



# Transportation Spending

## HF: Maintenance

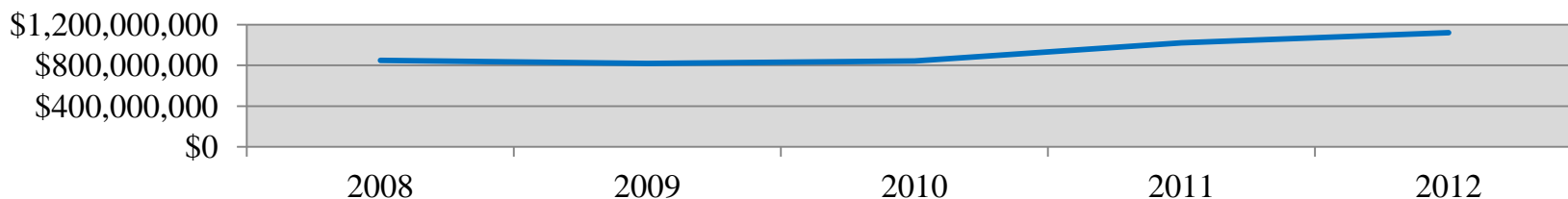
- 2012 Maintenance Condition Assessment Report Projections:**

Projected Shortfall FY 2014	Projected Shortfall FY 2015	Projected Shortfall FY 2016	Projected Shortfall FY 2017	Projected Shortfall FY 2018
\$64 m	\$49 m	\$37 m	\$79 m	\$35 m

- Five Maintenance Categories**

- Primary System (\$138m)
- Secondary System (\$246m)
- System Preservation (\$427m)
- Contract Resurfacing (\$235m)
- General Reserve (\$140m)

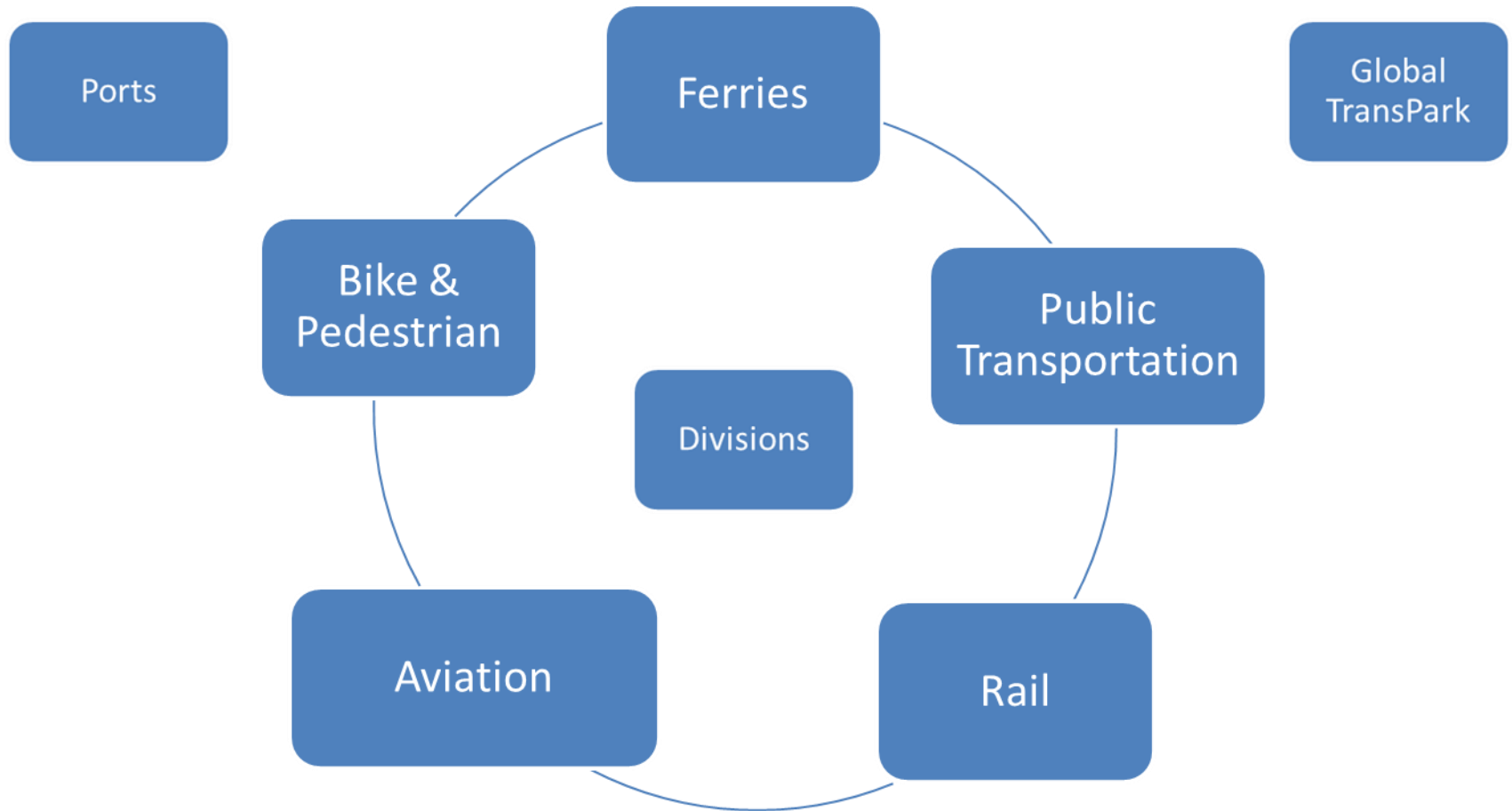
### Actual Expenditures, FY 2008 - 2012





# Transportation Spending

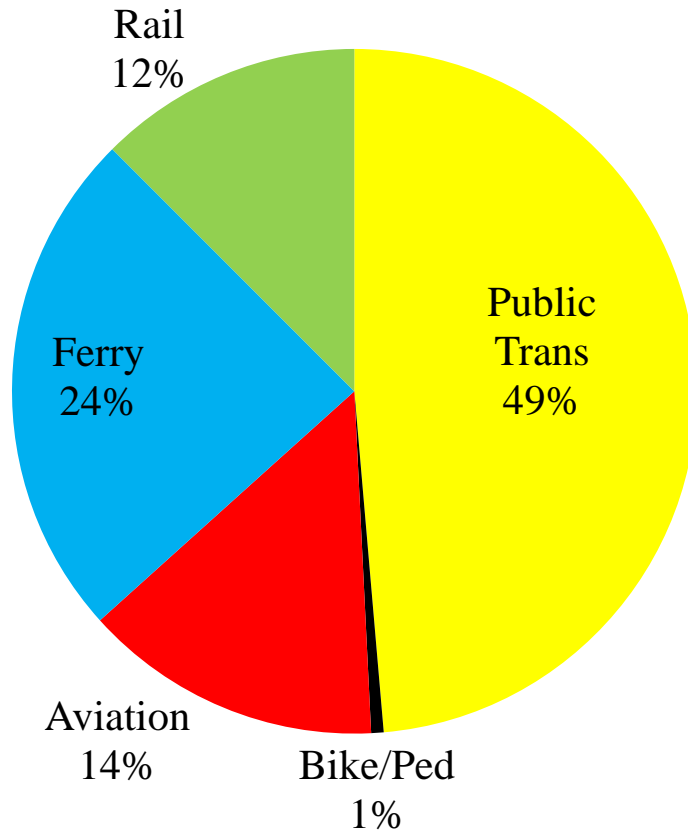
## HF: Intermodal



# Transportation Spending

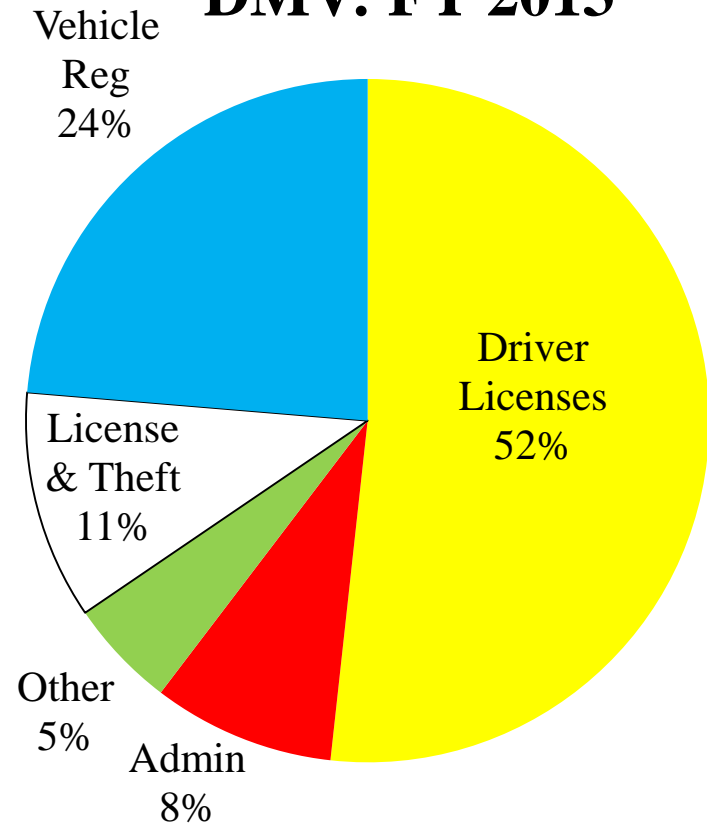
## HF: Intermodal and DMV

**Intermodal: FY 2013**



**\$175 million**

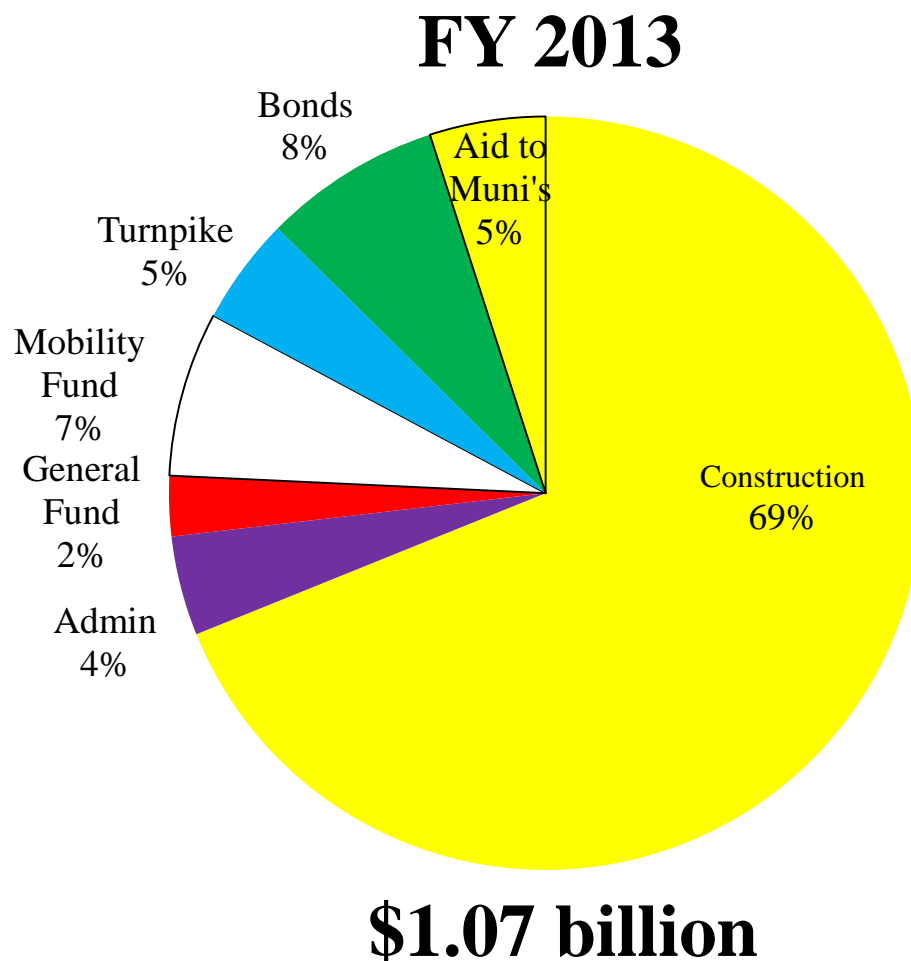
**DMV: FY 2013**



**\$92 million**

# Transportation Spending Highway Trust Fund

- State Construction Fund
- Construction includes:
  - Intrastate System (61.95%)
  - Urban Loops (25.05%)
  - Secondary Rds (6.5%)
  - Aid to Muni's (6.5%)
- Turnpike represents \$49 million in gap funding
- Transfer to General Fund *scheduled to be eliminated* in FY 2014



# Transportation Spending

## Highway Trust Fund Status at June 30, 2012

	Intrastate System	Loops
Total miles complete	2878	156
Remaining center-line miles to complete	802	203
Percent complete	(78%)	(43%)
Estimated remaining costs	\$8.7 billion	\$7.4 billion
Projected cost per center-line mile	\$10.9 million	\$36.3 million

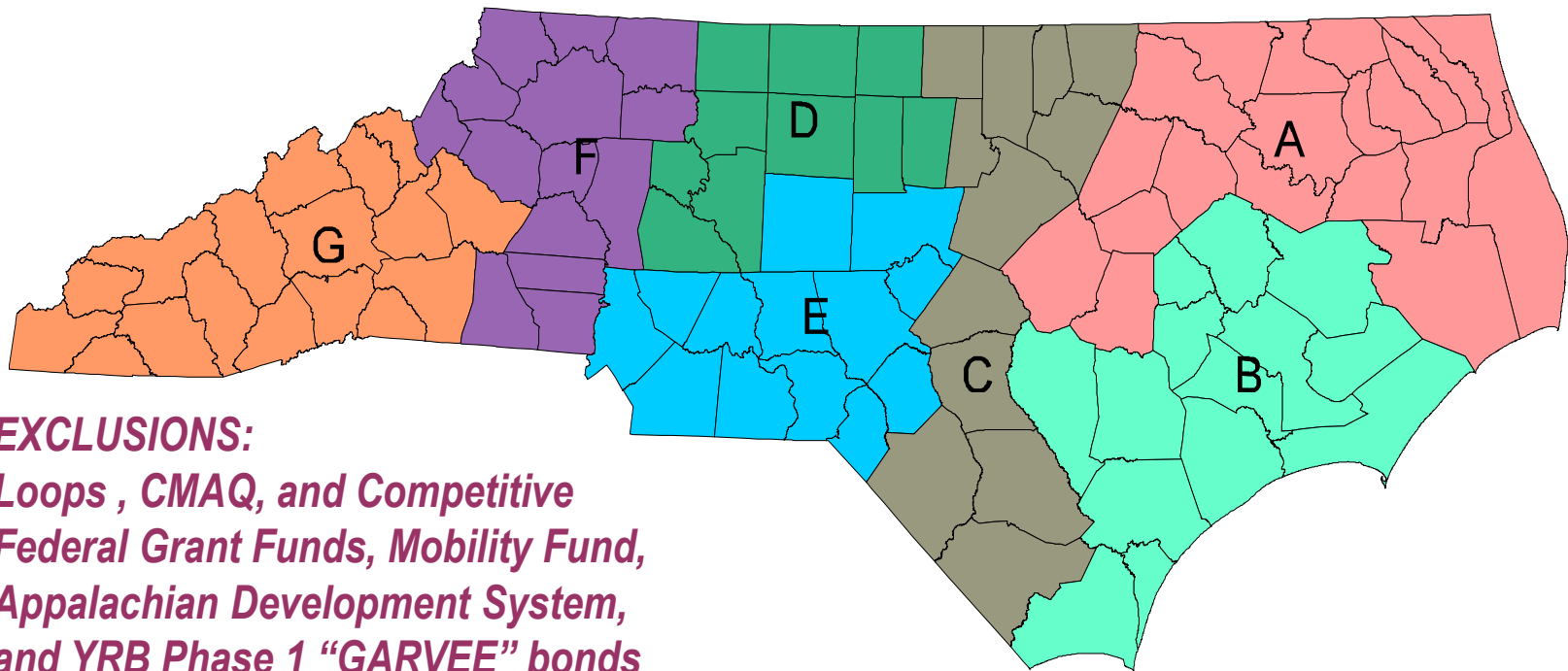
# Transportation Spending

## HTF: Transportation Improvement Plan (TIP)

- Required by federal law
- Includes regionally-agreed upon list of priority transportation projects
- Lists all projects that intend to use federal funds, plus all non-federally funded projects that are regionally significant. Includes other State funded capital projects.
- FY 2012 TIP Completion Rate: 71% in 2012
- Prioritization  $\neq$  Programming
- FY 2012 Prioritized Funding: 29.4% of total budget

# Transportation Spending 1989 Equity Formula

<p><b>50%</b> <b>POPULATION OF REGION</b> <b>AS PERCENT OF STATE</b></p>	<p><b>25%</b> <b>REMAINING</b> <b>INTRASTATE</b> <b>SYSTEM</b> <b>MILES</b></p>	<p><b>25%</b> <b>EQUAL</b> <b>SHARE</b></p>
--	---	---



## EXCLUSIONS:

*Loops , CMAQ, and Competitive  
Federal Grant Funds, Mobility Fund,  
Appalachian Development System,  
and YRB Phase 1 “GARVEE” bonds*

# Transportation Spending

## HTF: Mobility Fund

FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
\$39 million	\$31 million	\$75.5 million	\$58 million	\$58 million

- First project in named in statute: Yadkin River Bridge Phase 2
- All other projects selected based on PRIORITIZATION

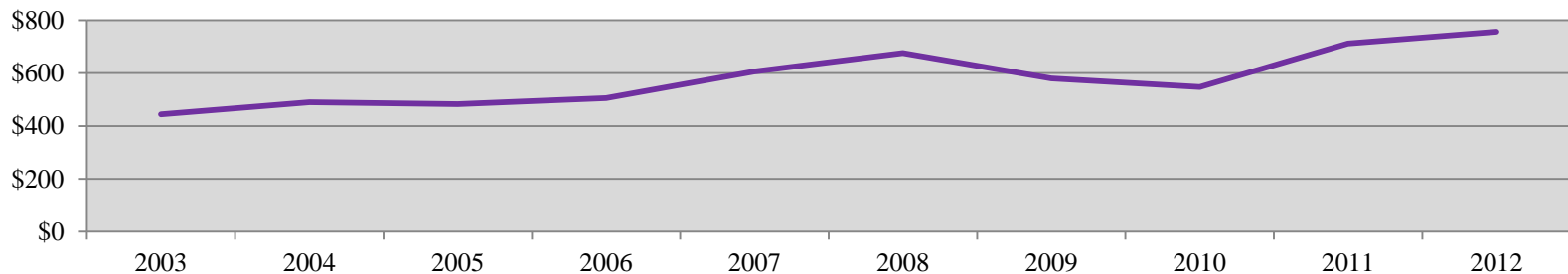
Criteria	Weight
<b>Mobility Benefit-Cost</b> – measured by the estimated travel time savings the project will provide divided by the cost to the Mobility Fund	80%
<b>Multimodal /Intermodal</b> – measured by whether the project provides an improvement to more than one mode of transportation and thus improves the efficiency of the overall transportation system.	20%

# Transportation Spending

## HF + HTF: Secondary Roads

- Three funds:
  - HF Maintenance (\$247m)
  - HF Construction (\$27m)
  - HTF Construction (\$48m)
- S.L. 2005-404 conformed uses of two construction funds purposes.
- 89% complete
- 64,411 total miles
- 3,689 miles unpaved:
  - 1625 eligible
  - 2064 on hold

**10-Year Expenditures (in millions)**





## Remaining Mileage of Eligible Unpaved Roads



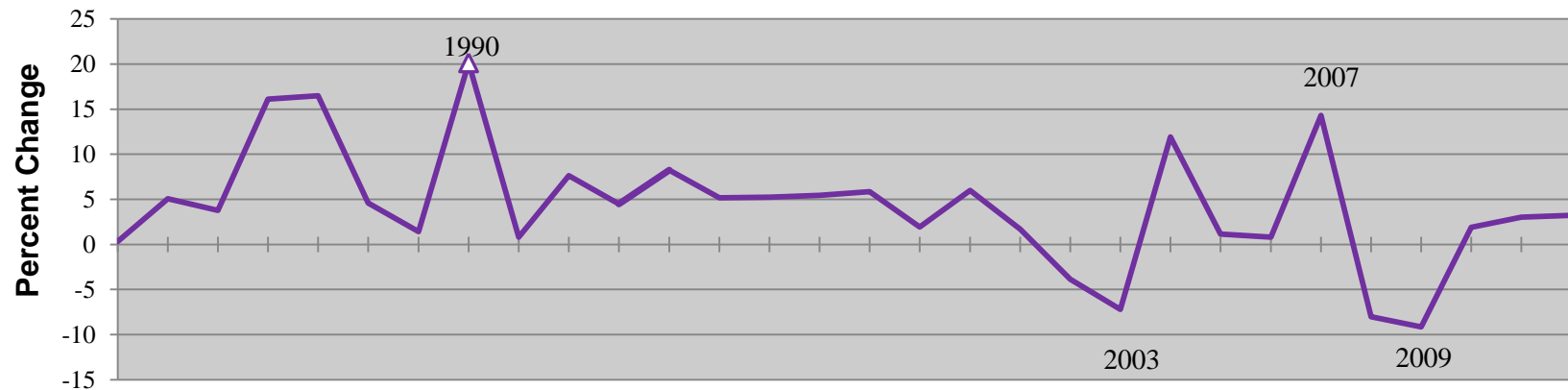
# Transportation Spending

## HF + HTF: Aid to Municipalities

- History and Formula
- Comparative Allocations
- Funding Constraints
  - Economic/Growth Patterns/Legislative

% Change: 1985 to 2012	
Municipalities	9%
Population	91%
Mileage	67%

**Total Amount Distributed: Annual % Change, 1983-2012**



# Transportation Spending

## Potential Items for Consideration

- What are your transportation funding priorities?
- Is it time to rethink the Highway Fund and Highway Trust Fund? Do the original purposes continue to exist?
- Is spending flowing to the areas with the greatest needs?
- Is it time to revisit the Equity Formula?

# Transportation Spending

## Potential Items for Consideration

- Should changes to the unpaved secondary road be made?
- Should existing Turnpike Projects be re-examined?
- Should tolls be used outside of existing Turnpike projects?
- Others?

## Summary

- North Carolina has a large, centralized highway system with state, not county, responsibility for secondary roads.
- The Highway Trust Fund was established in 1989 and, with federal aid, is the state's construction fund.
- The condition of the state's roads will deteriorate without additional funding for maintenance and preservation.
- Revenues will grow slowly under the current transportation tax structure while construction costs will rise.
- Expected population growth will put additional demands on new construction.

Questions?